

National Institute of Diabetes & Digestive & Kidney Diseases Workforce Plans 2002 and 2003

May 30, 2001

1. Workforce plans are linked to the goals and objectives of the scientific programs.

The NIDDK's workforce plans are closely linked to the broad strategic directions of the Institute relating both to its intramural scientific research program and to its planning, implementation and oversight of its extramural research portfolio.

NIDDK has recruited an outstanding new Intramural Scientific Director who plans major initiatives in two areas critical to NIDDK's mission: (1) Diabetes research particularly focused on pancreatic islets, which are central to the cause and treatment of both type 1 and type 2 diabetes, and (2) bioinformatics and computational biology, which are of vital importance if NIDDK scientists are to take maximum advantage of the wealth of new genome sequence information. Other areas of strength within the intramural research program include structural biology, animal models of human disease, and a newly established organ transplantation branch. Each of these areas requires hiring of additional junior scientists to maintain the vigor and outstanding productivity of these programs.

NIDDK's most urgent intramural goals include:

- To develop computational approaches to understand how proteins interact and how the pathways that regulate cell function are organized, and to create new approaches to analyze the vast amounts of biological information that are now being generated, in particular, that relate to the endocrine pancreas.
- To identify and characterize membrane lipid microdomains and their modulatory effect on the structural reorganizations of integral membrane proteins; and the development and application of innovative vibrational Raman and infrared spectroscopic imaging techniques.
- To delineate the embryologic development of the endocrine pancreas so as to better understand the pathogenesis of and to develop treatment for type 1 diabetes.
- Use protein structure to help "read" the genome and use the genome to help solve structures. Gain an integrated understanding of cell structure, from the molecular level, through the ultrastructural, and finally, at the level of the whole cell.
- Conduct basic, translational and clinical research aimed at understanding physiological regulation of the homeostasis of glucose and other nutrients and energy metabolism, and the abnormalities that are found in types 1 and 2 diabetes mellitus and obesity.

- Expand the gastro-intestinal program to incorporate more NIDDK employees to perform procedures in the clinic when needed and to provide in-house expertise for consultations. Special emphasis will be placed on inflammatory bowel disease.

The NIDDK workforce plan is also linked to extramural scientific goals and objectives, as described in #3.

2. The human resource implications of achieving strategic goals and the effect on the workforce.

The NIDDK has access to data that reveals retirement eligibility over a five year period. Although retirement is treated as a voluntary issue, we will plan to recruit and train more junior staff to fill the void left by expected and unexpected retirements so that attainment of our strategic goals is not adversely affected by the loss of experienced personnel.

Achieving our strategic goals also requires us to reduce or remove common barriers to recruiting and retaining a high quality and diverse workforce, particularly at the senior level. These barriers include the inability of Federal agencies to compete with private sector salaries, including those offered by foundations and academia. The other major barrier is a Federal recruitment process that is slow and cumbersome, due to its systematic nature.

3. Focusing resources on programmatic areas, rather than nonscientific.

The size and complexity of the NIDDK extramural program have recently grown significantly without concomitant growth in the staff necessary for diligent implementation and oversight.

For example, the HHS and NIH have delegated to the Institute the primary leadership role and responsibility for developing implementation plans for deploying a total of \$390 million in special funds for type 1 diabetes research provided by the Balanced Budget Act of 1997 (P.L. 105-33) and by the Consolidated Appropriations Act of 2001 (P.L. 106-554). These funds are in addition to and separate from funds provided through the regular appropriations process and place an extremely heavy burden on NIDDK staffing to ensure their appropriate management across the HHS. To develop initiatives that allocate these funds in a scientifically and fiscally responsible manner among the various institutes and centers of the NIH and other components of the HHS, the NIDDK needs a substantial increase in senior staffing at the scientific program level, as well as modest growth in its budget, program planning, and general analytical staff. The planning process for the use of these special funds requires the NIDDK to staff a variety of meetings for the development and prioritization of scientific concepts, and to develop narrative reports and budget tables for allocating and monitoring the funds. Increased staffing is also required for continuous assessment of initiatives on type 1 diabetes supported with these special funds in order to develop a statutorily mandated evaluation of the program and to meet both ad hoc and statutorily mandated reporting

requirements. In related efforts, increased staffing is especially required to support the planning of a 10-year initiative on the epidemiology of type 1 diabetes, which was authorized within the NIDDK statutory base by the Children's Health Act of 2000 (P.L. 106-310), as well as for the development of a clinical trials infrastructure and for diabetes prevention efforts also authorized by that Act specifically for type 1 diabetes.

For diabetes generally, the NIDDK's workforce plans take cognizance of a parallel strategic planning effort that requires the Institute to take lead responsibility in implementing--across the entire NIH--the scientific recommendations of the congressionally established Diabetes Research Working Group (DRWG). The DRWG's 5-year plan contains over 80 recommendations for guiding the future scientific directions of NIH-wide diabetes research. These recommendations encompass not only type 1 diabetes, but also type 2 diabetes; the eye, heart, nerve, kidney and other complications of diabetes; the needs of special populations such as children, the elderly, and minority groups; and physical infrastructure and research manpower needs. To facilitate the development of the NIH diabetes research portfolio in all these areas--with special attention to the five extraordinary research opportunities identified by the DRWG as having the highest priority for strategic planning--the NIDDK needs additional staff to work collaboratively with other NIH institutes in framing an agency-wide research agenda. Such additional staff is also needed for responding in an accountable manner to continuing congressional and public inquiries about implementation of the DRWG Strategic Plan.

Additional staffing is also required to pursue implementation of many other strategic plans. These include the Institute's own strategic plan in the areas of genetics, cell biology, clinical research and infrastructure, as well as the NIDDK Strategic Plan on Minority Health Disparities. Moreover, the Institute is responsible for developing approaches for implementing or otherwise responding to the recommendations contained in strategic plans developed by the renal community, the liver disease community and other NIDDK voluntary and professional groups. The NIDDK must have staff who can give full and expert review to the scientific recommendations of outside groups in order to fulfill the goals of public liaison set out for the NIH in a congressionally mandated report by the Institute of Medicine.

Another example of the linkage between the NIDDK workforce plans and the Institute's strategic objectives is the NIDDK's need for additional staff in order to support the efforts of three, newly-established strategic planning groups of external scientific experts. Established by the NIDDK Director as working groups of the NIDDK National Advisory Council, these strategic planning groups are addressing cross-cutting topics that have broad and long-term relevance and application to all of the divisions and programs of the Institute--genetics, genomics and bioinformatics; cell and developmental biology; and disease prevention and management, with an emphasis on the strategic planning process for large, multicenter clinical trials.

In line with the NIDDK Strategic Plan and related strategic planning processes, NIDDK is expanding its clinical trials, prevention and public education efforts in the areas of

diabetes, obesity and end stage kidney diseases. In order to manage and provide comprehensive oversight for these efforts, several critical positions are required including: two Program Directors (MD's) in DEM to provide enhanced support to the National Diabetes Educational Program (NDEP) and Type 1 Diabetes Trial Net; one Program Director (PhD) in DDN for the Prevention and Treatment of Obesity; one Program Director (MD) Pediatric Nephrologist in KUH and a Bio-Statistician to provide support to all of the NIDDK Clinical Trials.

In summary, these examples demonstrate that the Institute's workforce plans clearly recognize and are compatible with the need for increased staffing in order to ensure appropriate long-term scientific planning and fiscal accountability for NIH programs that are the focus of substantially increased funding and emphasis from the Congress and the Administration. With an appropriation of approximately \$1.3 billion of its own funds, plus responsibility for directing large NIH-wide and HHS-wide programs of national importance, the NIDDK must recruit additional staff in order to respond adequately to growth, opportunities and needs. These new NIDDK responsibilities require staff at all levels—senior scientists, budgetary and other analytical support staff, and a wide range of technical staff who can enhance the Institute's efforts in data collection, maintenance and analysis so that the NIDDK can meet its scientific, managerial and fiduciary responsibilities.

4. What impact facilities or other constraints will have on HR planning.

NIDDK has space to accommodate the projected hires for the next two years. The intramural laboratory space is in the NIH master plan for decompression over the next ten years. This is long overdue and requires Building and Facilities funding.

5. Impact of technology.

Technology has made it possible to provide detailed information to patients, grantees, employees and a diverse population around the world. This has improved the knowledge of the population with regard to all of our major disease areas and has enabled the rapid dissemination of research results for the benefit of patients and health practitioners. It is vital to support this function as it is an important means of promoting health and preventing disease. There are major systems that need replacing at NIH.

6. How telecommuting and other flexible workplace programs will be affected or will help.

The NIDDK will continue to recruit in areas that will attract superior applicants from diverse backgrounds. As special needs arise, recruitment mechanisms will include professional journals, prominent newspaper ads to target certain groups in specific

markets, and of course, the Internet. For recruits, we will employ other inducements such as student loan repayments and recruitment bonuses. For current staff who are critical to our program, we will utilize retention bonuses and a variety of training resources. Alternative work scheduling, where appropriate, will be made available upon request. Flexible workplace programs help to boost the morale of the employees and make for a more productive work environment.

7. How performance management will be used to manage workforce issues.

The Office of the Director of NIDDK has delegated a number of administrative authorities to Division Directors, including the Scientific Director. Some authorities have been further delegated to senior Administrative Officers. This delegation has streamlined the decision-making process, thus leading to a more efficient operation. It has also eliminated the need for additional layers of administrative review and, in some cases, additional supervision. Examples include the administration of the awards program, training program, automated leave and pay administration.

8. How buyouts or early retirements could help.

The fact that the Federal Government does not have mandatory retirement is not a barrier; however, the policy does make it difficult to project workforce levels adequately over a period of time. It is imperative to have effective workforce restructuring to have the delegation of "carry out" and "buy out" authority.

9. Other issues that are critical to the program.

It is critical that each IC be given as much flexibility and overall management authority as possible for any restructuring or downsizing. Mandatory ceilings in certain series cause extreme staff shortages. When disequilibrium occurs between staffing levels and staffing needs in components of the NIDDK, it causes morale problems and overloaded employees seek other positions outside government. This is a very important time period in the history of federal service. It is important to exercise caution when putting excess controls on a declining, aging workforce.

NIDDK Hiring Plans for FYs 2002/2003			
	FY 2002	FY 2003	Total
INTRAMURAL			
Senior Investigators ¹	0	3	3
Investigators ¹	12	10	22
Other MD/PhDs, in FTE positions	58	52	110
Other MD/PhDs in non-FTE positions (IRTA, VF)	92	86	178
Other lab/clinical staff => GS-13	2	2	4
Other lab/clinical staff =< GS-12	42	37	79
Admin/support staff => GS-13	80	80	160
Admin/support staff =< GS-12	3	3	6
Infrastructure support => GS-13	7	5	12
Infrastructure support =< GS-12 ²	0	0	0
Summer and other temps not listed above (include summer IRTAs)	0	0	0
TOTAL INTRAMURAL	296	278	574
EXTRAMURAL			
HSAs/SRAs and other senior level science administrators => GS-13	12	3	15
Other science administration positions =< GS-12	0	0	0
Grants Management and R&D Contract Staff => GS-13 ³	2	0	2
Grants Management and R&D Contract Staff =< GS-12 ³	0	0	0
Administrative and support staff => GS-13	4	0	4
Administrative and support staff =< GS-12	5	6	11
Infrastructure support => GS-13	0	0	0
Infrastructure support =< GS-12 ²	1	0	1
Summer and other temps not listed above	0	0	0
TOTAL EXTRAMURAL	24	9	33
IC TOTAL	320	287	607
¹ Using OIR professional designations			
² Include all wage grade positions related to infrastructure in this group			
³ Includes 1101, 1102, 301 and 303 series where individual is engaged in these activities on a full-time basis.			